

FINDING OF NO SIGNIFICANT IMPACT

For the Proposed Sonoran Pronghorn Forage Enhancement Project on the Barry M. Goldwater Range

1. Description of Proposed Action

The Air Force and the Marine Corps with the participation of the Bureau of Land Management propose to grow native annual and perennial forage for Sonoran pronghorn in 10 areas on the BMGR beginning in fall 2000. This project stems from formal consultation with the U S. Fish and Wildlife Service that produced a Biological Opinion and Recovery Plan for the Sonoran Pronghorn antelope. This forage enhancement proposal is one of the measures required by the Recovery Plan. The 10 proposed plots were selected from areas the pronghorn have used repeatedly during the last five years, as documented using radio-telemetry data on collared animals. All plots are located in areas of sandy soils, which are conducive to forage growth and persistence. The specific locations and prescribed treatments are consistent with Alternative A of the environmental assessment.

A total of 1,983 acres (8.03 km²) may be affected by this project. Eight of the 10 plots are 1 square kilometer in size (247 acres). Two of the 10 plots are about 500 meters long and 30 meters wide (0.015 km²) and are located along existing roads.

Within each plot, a combination of habitat manipulation strategies will occur based on the characteristics of the site and logistics. Those activities, and the extent and nature of expected disturbance, are described below.

Creosote Removal. Creosote (*Larrea tridentata*) will be selectively thinned by hand on all plots, using a propane torch to selectively burn individual plants. No heavy equipment will be used. Creosote thinning will reduce plant competition for water, allow additional forb production, and increase openness. Creosote will not be removed along desert washes or on desert pavement terraces, or in areas where they are already sparse, and in order to reduce visual impacts, no creosote will be removed within 100 feet of existing roads. Where cultural resources are found, RMO archaeologists will establish a buffer zone and no thinning or other project activities will occur within that area.

Irrigation Wells and Water Storage. Three irrigation wells will be sited within the areas surveyed for the plots themselves. One well will serve the Mohawk Pass and Mohawk Dune plots, one will serve the three Granite Mountain plots, and one will serve the Point of the Pintas plots. If individual well yields are insufficient, storage tanks will be required at each plot. The hardware at each well site will include the wellhead, a water storage tank, and storage for any piping, pumps, power sources and associated equipment that will be kept onsite between irrigation episodes.

Water Trucks. The three Aztec Hills plots will be served by water trucks, rather than wells. Water will be stored in aboveground storage tanks at each of these plots and will be pumped from the tanks to an aboveground sprinkler system. Trucks will be restricted to existing roads.

Water Sprinkler Application. The water will be pumped from the ground using a submersible pump powered by a truck-mounted generator and delivered to each of the plots using a PVC pipe system. An aboveground sprinkler system will apply water to the plots. The irrigated area will be about 7,500 square meters in size (1.85 acres) per plot.

Raking and seeding. To improve the germination of seeds already present in the soil, the ground surface will be lightly raked by hand to a depth of approximately one inch (2.5 cm) prior to the first application of water. Areas within the sprinkled plots where natural germination does not produce enough forage may be seeded. Seeds of native plants will be hand collected on the BMGR; a garden rake will be used to produce a favorable seedbed, and seeds will be applied by hand.

Standing water. A temporary supply of standing water will be available at five of the forage enhancement plots (Mohawk Pass, Mohawk Dune, Granite Mountains #1, Aztec Hills #1, and Point of the Pintas #1). The water will be stored underground in a single length of buried PVC pipe, 24 inches in diameter and 21 feet in length, with a capacity of 490 gallons. The pipe will be filled with well water delivered through a smaller pipe and will be connected to a 30 inch-deep walk-in drinker.

Camping/Staging Areas. Field crews may camp at or near the project sites during creosote thinning and construction. Designated campsite/staging areas will be flagged in order to minimize the impact of vehicle and foot traffic and will be located in previously disturbed areas whenever possible.

2. Summary of Environmental Impacts

Soils and Vegetation. Soil and vegetation disturbance would occur in each of the areas outside of the desert washes and desert pavement terraces. The area of disturbance would vary between each of the 10 project sites, but would be less than 247 acres total for each of the 1 km² plots.

The impacts to soils and vegetation associated with the proposed action would be minor in the short and long terms.

Wildlife. The establishment of disturbed areas with increased forage production and water for Sonoran pronghorn could attract other species of wildlife as well, including rabbits, rodents, coyotes, painted lady butterfly caterpillars, and seed-eating birds. A temporary displacement of wildlife at each of the sites during construction as a result of human activity is expected.

The adverse impacts to wildlife associated with the proposed action would be negligible in the short and long terms.

Threatened and Endangered Species. The proposed project is expected to increase forage quantity and quality for Sonoran pronghorn during the late spring and early summer months. Fawn survival is expected to increase resulting in recruitment of more fawns each year into the population. The addition of free water during these critical periods is expected to allow the lactating does to continue to produce milk for their young, thereby increasing their survival. Healthy, well-fed and hydrated pronghorn are more resistant to disease, are more alert to and able to outrun predators, and are better able to withstand disturbances.

Burning of creosote, well drilling, sprinkler set-up, and the installation of free-standing water would be done during the times of the year (fall, early winter) when Sonoran pronghorn are not likely to be using the plot areas. The project areas would be visually scanned prior to any work to avoid pronghorn disturbance. The use of a sprinkler system and wells would reduce the amount of noise from vehicles.

Every effort would be made to minimize disturbance to pronghorn, moreover we believe that any accidental disturbance to individual pronghorn would be temporary and would be offset by the beneficial effects of the project.

Lesser long nosed bats are known to roost 50 miles away, near Organ Pipe Cactus National Monument. Since we would not be disturbing foraging habitat (saguaro and/or agave stands), there would be no foreseeable effect on this species.

The adverse impacts to threatened and endangered species associated with the proposed action would be negligible in the short and long terms.

Land Use and Ownership. No changes to land use or ownership would result from the proposed action.

There would be no impacts to land use and ownership associated with the proposed action.

Cultural Resources. A survey of cultural resources has been completed on the proposed plots. All cultural resources, including affiliated buffer zones, would be completely avoided by the project. The size and shape of the buffer areas would be determined by the archeologists. Avoidance areas would be marked in a way that allows those participating in the project to easily avoid the areas while not attracting too much attention to the cultural resource sites. The State Historic Preservation Office has requested additional evaluation of cultural resources that may be present in two of the plots (Point of the Pintas #1 and #2). Project-related activities in these areas will not commence until consultation with the State Historic Preservation Office and other parties has been completed. The State Historic Preservation Office has concurred with the Air Force's finding that no historic properties will be affected by the activities proposed for the remaining plots.

Since all cultural resources would be avoided, the impacts to cultural resources associated with the proposed action would be negligible in the short and long terms.

Air Quality. The use of gas-powered tools and vehicles used to reach and implement the proposed projects would produce small amounts of carbon monoxide emissions and dust. Airborne dust in the immediate area of creosote removal and the installation of the temporary free-water systems would increase immediately after project construction,

especially during periods of wind. Burning of individual creosote shrubs can be expected to produce temporary smoke. This impact is expected to be negligible. The movement of water trucks, maintenance vehicles and irrigation crew vehicles on the existing dirt roads would produce dust, which would remain in the air temporarily.

The impacts to air quality associated with the proposed action would be minor in the short term and negligible in the long term.

Visual Resources. The design of the proposed project follows the guidelines for a Class III visual resources management area. Each forage enhancement area would have irregular boundaries and would be covered with annual forage. Later, when the annual forage plants have dried up, their appearance would be a natural component of the landscape. Efforts would be made to avoid creating any straight lines during creosote removal and to leave creosotes along the roads used by the public.

The impacts to visual resources associated with the proposed action would be negligible in the short and long terms.

Recreation. Providing water and forage for Sonoran pronghorn during the late spring/early summer is designed to increase the number of pronghorn. This may not affect or may very slightly increase recreational use through additional wildlife viewing opportunities. Only two of the proposed forage enhancement plots under the proposed action are in areas currently accessible to the public (Point of the Pintas #1 and #2).

The impacts to recreation associated with the proposed action would be negligible in the short and long terms.

Water (Surface and Ground). No effect to local surface water drainages or related water sources is expected to result from the proposed action. The wells used to irrigate the plots would use approximately 10-15 acre-feet of ground water each year, depending on rainfall. According to the Arizona Department of Water Resources, the estimated available groundwater in the San Cristobal Valley portion of the Lower Gila Hydrologic Basin far exceeds the demands that would be placed on it from the three proposed wells. The amount of water required to be hauled to the three Aztec Hills plots is estimated at 2-3 acre-feet per year. This water would be available from the Wellton-Mohawk Irrigation and Drainage District and other sources, and is not expected to adversely impact other users or uses.

The impacts to surface and ground water associated with the proposed action would be minor in the short term and none in the long term.

Invasive, Non-native Species. Numbers of Sahara mustard or buffelgrass plants may increase in the areas where creosote removal is proposed to take place. Sonoran pronghorn are known to eat small amounts of both plants. Sahara mustard may be removed by hand within the watered areas. It would be clear that Sahara mustard or buffelgrass is competing with the native forbs if the density of native forbs is less within the plots than outside of the plots. Buffelgrass would be aggressively removed if found on the forage plots.

The impacts from invasive, non-native species associated with the proposed action would be negligible in the short and long terms.

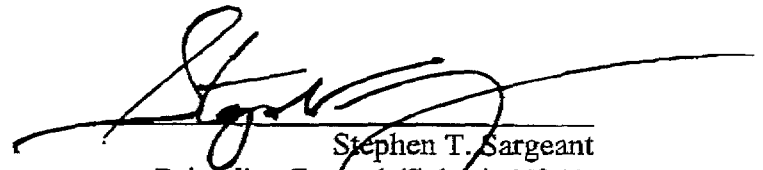
Areas of Critical Environmental Concern. One plot proposed in the action (Mohawk Dune) is partially within the Mohawk Mountain and Sand Dune ACEC. Establishment of

this plot would follow the guidelines for the management of this ACEC. Care would be taken to soften the outline of the plots by avoiding straight lines. Existing roads would be used to access the Point of the Pintas plots and the Mohawk Pass and Mohawk Dune plots, which follow the boundary of the Mohawk Mountains and Sand Dunes ACEC.

The impacts on ACECs associated with the proposed action would be negligible in the short and long terms.

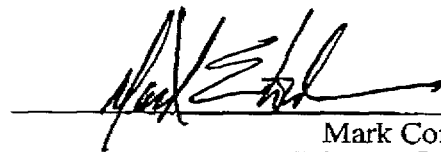
3. Finding of No Significant Impact

Based on a detailed analysis of environmental issues in the EA, the Air Force's proposal to grow native annual and perennial forage for Sonoran pronghorn in 10 areas on the BMGR does not constitute a major federal action significantly affecting the quality of the human environment. The current analysis completes the requirements pursuant to the National Environmental Policy Act and its regulations promulgated by the Council on Environmental Quality and Air Force Instruction 32-7061 (6 July 1999, available as 32 CFR Part 989 in the Federal Register at July 15, 1999 Vol 64, Number 135, Page 38127-38143). Therefore, an environmental impact statement is not required.



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Date 23 Jan 01